

George's Fields, Kilburn, and, it is believed, of Epsom.

Whenever a well is sunk above the London clay, the immediate rise of the water has some effect in depressing for a time that of the neighbouring wells; but this is only temporary, for there is no pressure from below. These are not artesian fountains. The latter fountains must be sought for (supposing, to avoid expense, that the uppermost beds were taken) in the alternating sands and clays of the plastic clay formation, or to be more certain of a plentiful supply, in the chalk itself: in either they could have no possible effect whatsoever on any neighbouring wells.

An account is given in Conybeare and Phillips' "Outlines of the Geology of England and Wales" of a well sunk at Messrs. Liptrap and Smith's distillery, one mile east of London, in which the alluvium, London clay, and plastic clay were traversed, and 150 feet of the chalk; the land-springs supplying the London wells were met with at a depth of 29 feet; two beds of the London clay yielded water; a good spring was met with in the lower sandy beds of the plastic clay, and a spring was met with in the chalk at a depth of 123 feet (in the chalk). The lower beds of the chalk formation and every fissure in them are, with very few exceptions, completely filled with water.

As the chalk and plastic clay are in the neighbourhood of Trafalgar-square at a lower level than the higher districts which supply those formations with water, so not only may a powerful fountain be anticipated in such a quarter, but also a rise which will be especially well adapted for ornamental purposes, and that without having any connection whatever with neighbouring wells.—*Literary Gazette.*

#### NEW ARCHEOLOGICAL ASSOCIATION.

This new society, called the "British Archaeological Association for the encouragement and prosecution of researches into the arts and monuments of the early and middle ages, particularly in England," it is to be under the direction of a central committee resident in London; and among its patrons are already ranked the Marquess of Northampton, President of the Royal Society; the Earl of Aberdeen, K.T. President of the Society of Antiquaries; the Earl of Powis; Lord Albert Conyngham; the Lord Bishops of Durham, Salisbury, Norwich, and Lichfield; Lord Stanley of Alderley; Sir E. H. Alderson, Baron of the Exchequer; Mr. Hallam, and Mr. W. R. Hamilton, Vice-Presidents of the Society of Antiquaries. The members of the committee, at present arranged, are: T. Amoy, Esq., F.R.S.; Wras, S.A.; C. F. Barwell, M.A., F.R.S.; F.S.A.; late of the British Museum; Edward Blore, D.C.L., F.S.A.; W. Bromet, M.D., F.S.A.; the Rev. J. B. Deane, M.A., F.S.A.; G. L. Bantlake, R.A., F.R.S.; F.S.A.; Sir H. Ellis, F.R.S., Sec. S.A.; E. Hawkins, F.R.S., F.S.A., Keeper of the Antiquities, Brit. Mus.; T. W. King, Esq., F.S.A., Rouge Dragon Pursuivant; Sir F. Madden, Knt., F.R.S., F.S.A., Keeper of the MSS., Brit. Mus.; T. J. Pettigrew, Esq., F.R.S., F.S.A., Treasurer; Ambrose Poynter, Esq., Hon. Sec. R.I. Brit. Arch.; C. Rouch Smith, Esq., F.S.A., Honorary Secretary; T. Stapleton, Esq., F.S.A.; Albert Way, Esq., M.A., Dir. S.A.; Sir R. Westmacott, R.A., F.S.A., Professor of Sculpture, H. Acad.; C. Winston, Esq.; and Thomas Wright, Esq., M.A., F.S.A., Corresponding Member of the Institute of France, &c.

The want of such an active institution of this kind has long been a reproach to the country, and caused the irreparable loss of many a precious relic of antiquity. Its professed objects are "to investigate, preserve, and illustrate all ancient monuments of the history, manners, customs, and arts of our forefathers, and, in furtherance of the principles with which the Society of Antiquaries of London was established, to render available the researches of a numerous class of lovers of antiquity who are unconnected with that institution." The means proposed are, "1. By holding communication with correspondents throughout the kingdom, and with provincial antiquarian societies; as well as by direct intercourse with the Comité des Arts et Monuments of the Ministry of Public Instruction in France,

and with other similar associations on the Continent instituted for the advancement of antiquarian science. 2. By holding frequent and regular meetings for the consideration and discussion of communications received from correspondents and any other persons. 3. By promoting careful observation and preservation of antiquities discovered in the progress of public works, such as railways, sewers, foundations of buildings, &c. 4. By encouraging individuals or associations in making researches and excavations, and affording them suggestions and co-operation. 5. By opposing and preventing, as far as may be practicable, all injuries with which ancient national monuments of every description may from time to time be threatened. 6. By using every endeavour to spread abroad a correct taste for archaeology, and a just appreciation of monuments of ancient art, so as ultimately to secure a general interest in their preservation. 7. By collecting accurate drawings, plans, and descriptions of ancient national monuments, and, by means of correspondents, preserving authentic memorials of all antiquities which may from time to time be brought to light. 8. By establishing a journal devoted exclusively to the objects of the association, as a means of spreading antiquarian information and maintaining a constant communication with all persons interested in such pursuits. 9. By taking every occasion which may present itself to solicit the attention of the government to the conservation of our national monuments, and to the other objects of the association."—Exertions are being made to issue the first No. of the *British Archaeological Association Journal*, which will be a record of all the proceedings, towards the end of March. No fixed plan of pecuniary consideration has as yet been arranged. On the contrary, it is at present voluntary; but we understand it is proposed to hold, at appointed times, an Historical Congress, something after the manner of the British Association, on which occasion we propose there shall be some call for the "sinecure of war." It is proposed that the assemblage should be made at some place remarkable for its historical monuments, and its objects of antiquity; and we believe that Canterbury or Winchester will be fixed upon for the present year.

#### SOCIETY OF ANTIQUARIES OF NEW CASTLE.

THE thirty-first anniversary of this society was lately held, on which occasion the chair was taken by John Clayton, Esq., when the usual statement of accounts was read, after which the report of the council was read to the meeting. It stated that further delay had been experienced in the appearance of the Pipe Rolls, but it was expected that members who had contributed to the work would shortly receive their copies. The memorial presented to the Town Council respecting the Brand manuscripts remained unanswered. Successful operations had been carried on in exploring Roman stations at Rillingham and Walwick Chesters: Mr. Shanks had enriched the society's collection with various objects of antiquity found at the former place, and Mr. Clayton had contributed to the "Transactions" an account of his discoveries at the latter. The council having found that there were sufficient papers, with those contributed during the past year, to form a concluding part to Vol. III. of the "Transactions," have determined to print them, and an interesting part will be published. Great attention has been paid to the elucidation of the discoveries mentioned in the preceding pages. By the efforts of sundry individual members, several gentlemen have joined the society, but such exertions must still be kept up in order to secure such a fund as will enable the society to carry on the measures for which it was originally formed. The following gentlemen have become members during the year: namely, P. H. Howard, Esq., M.P., Corby Castle; Wm. Sidney Gibson, Esq., Newcastle; the Rev. W. F. Raymond, Archdeacon of Northumberland; Dr. Besley, Vicar of Long Buntun; Rev. Edward Ilsey Adamson, incumbent of St. Alban's; H. Ingledeu, Esq., Newcastle; J. Straker, Esq., Point Pleasant; Geo. Walker, Esq., architect, Newcastle. Whilst these acquisitions have been made, however, the society have to lament the deaths of Messrs. Buddie and Hewison, and the resignation of Christopher Blackett, Esq.

At this meeting Charles Roush Smith, Esq., was elected an honorary, and Mr. Ions Hewison an ordinary member. The various presents received during the year were laid upon the table for the inspection of the members, and the following gentlemen were chosen officers for the ensuing year, namely, President, Sir J. E. Sturtevant, Bart., F.S.A.; Vice-Presidents, C. W. Bigge, Esq., Sir C. Monck, Bart.; and the Rev. J. Hodgson; Secretaries, John Adamson, Esq., F.S.A.; and Henry Turner, Esq.; Council, J. H. Hinde, Esq., M.P.; John Clayton, Esq.; John Fenwick, Esq.; Rev. James Raine; Dr. Headlam; R. R. Dees, Esq.; H. G. Potter, Esq.; Dr. Charlton; E. Charnley, Esq.; W. Dickson, Esq.; Thomas Bell, Esq.; and M. A. Richardson, Esq.

#### YORKSHIRE LAND DRAINAGE ASSOCIATION.

THE application of capital to the general and complete drainage of land, as a means of investment—while it would confer the greatest benefit to the farmer, as well as the landholder himself—has, among all the various speculations which have been brought before the public during the past twenty years, been completely lost sight of: to induce, however, capitalists to embark properly in this useful and certain (and to say the least) lucrative employment, the attention of the legislature was called to the subject, and, by an Act of Parliament, 3 & 4 Vict., cap. 55, power is given to the owners of settled estates to defray the expenses of draining the same by way of mortgage, and to charge all or any part of the lands so drained with payment to any persons willing to advance the capital necessary for the purpose, either as a rent charge, or by equal yearly instalments, of not less than twelve or more than eighteen years.

This Act embraces in its enactments most clearly the objects sought to be attained by an association on the principles of one which has just been formed under the above title, which, while it numbers among the names upon the provisional committee and among its patrons some of the first in the kingdom as farming landholders, enters upon the proposed undertaking with a spirit commensurate with its importance. The proposed capital is 500,000*l.*, in shares of 25*l.* each; and at the present moment, when agricultural improvement of such urgent necessity, there is little doubt the association will be properly supported; populous as England is, and extensive as are her towns and villages, compared with other portions of the globe, there is vast room for improvement in agricultural pursuits, and the consequent investment of capital. It is calculated that by proper management the soil of this country could be made to produce four times the amount of food at present raised from it; and, though this will in a great measure depend upon chemistry, as applied to agriculture, still a thorough principle of drainage must in all cases be carried out before chemical effects can be properly developed. Under such circumstances, we hail with much gratification the establishment of such an association, the results of whose operations, we have no doubt, will tend to secure an increase of production, and, consequently, lessen much of the present misery in the agricultural districts, and counterbalance the general depression which prevails in that branch of industry. As this association will in all cases proceed on the most recent improvements, and carry on all its undertakings on the most judicious principles extant, further openings will doubtless be made for the production of many articles of manufacture for drainage, as well as other purposes of agriculture. Ainslie's patent tile machine, the Marquis of Tweeddale's, and various others, have been followed by Watson's patent draining process, which has been so successfully applied to cuttings and embankments on railroads and canals; and the operations of this association will tend to call into activity many other inventions, which, from the want of a stimulus, have hitherto lain dormant. The safety of such a speculation cannot be better shown than by quoting the words of Lord Stanley (no mean authority on the subject) at a meeting of the Royal Agricultural Society of England, held at Liverpool, in July, 1851—he says, "There